

## Abstract

This invention is an expendable container capable of measuring a residual quantity of stored expendable. The expendable container comprising an expendable tank configured to store the expendable and has a piezoelectric element attached thereto; a detection signal generation circuit configured to charge and discharge the piezoelectric element, and generate a detection signal including cycle information, the cycle information representing a cycle of an output voltage wave of the piezoelectric element after the discharge; and a control module configured to control the charge and the discharge of the piezoelectric element by the detection signal generation circuit. The detection signal generation circuit comprises: a comparator configured to compare a voltage of the output voltage wave with a reference voltage for residual quantity detection, and generate a pulse according to a result of the comparison; and a signal generator configured to generate the detection signal in response to the generated pulse. The control module is capable of varying the reference voltage for residual quantity detection.